

Laboratory Service Spectroradiometer

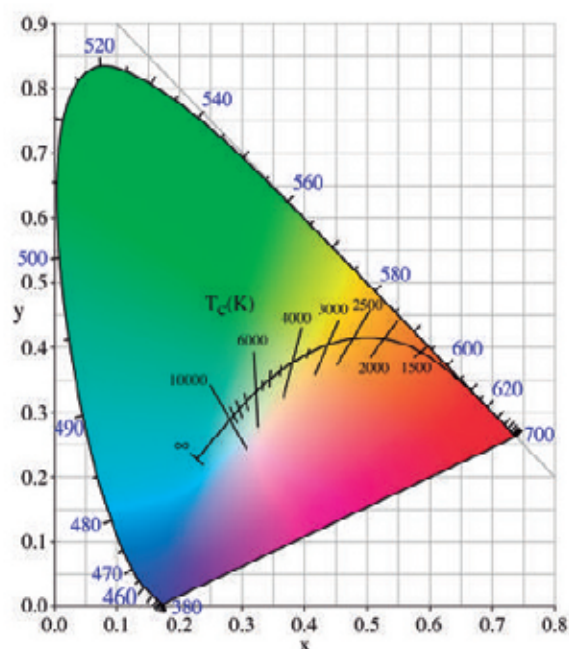


Test report with integrated
sphere of 150cm



The test report supplied by Luz Negra and carried out by the Spectroradiometer with integrated sphere of 150cm will offer us a lot of detailed information regarding luminous aspects of the lighting system or led product, highlighting the following:

- Luminous flow in lumen.
- Luminous efficiency.
- Wave length (graph).
- Length of dominanat wave.
- Step MacAdams (tone difference between leds).
- IRC - CRI (Colour rendering index).
- Colour temperature (Kelvin).
- Colour ratio RGB.
- Power.
- Voltage (metering).
- Intensity.
- From R1 to R15, very interesting, especially the R9 which highlights the relevance of red in he real colour transmission (high CRI).
- Others.....



Chromaticity diagram

From all the options, the most requested is normally the **LUMENS** since, for the calculation it's necessary to have a Spectroradiometer or a Photogoniometer (few companies have this type of machinery due to the elevated cost).

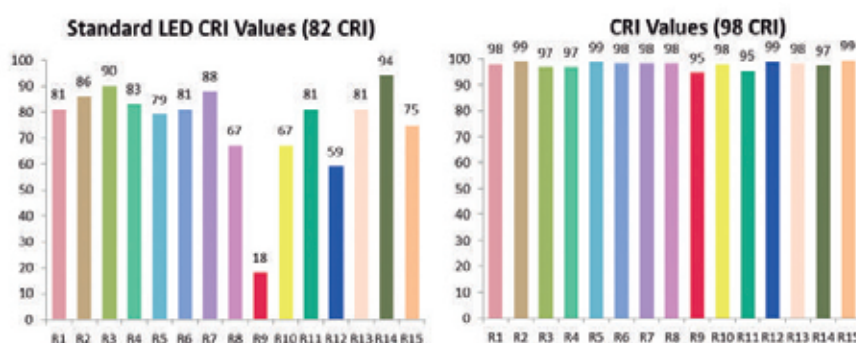
The majority of companies only have access to the **LUX** which they can achieve with a simple luxmeter, but this data can only offer a certain amount of light in a precise place and with a defined angle and therefore does not give us the total amount of brightness offered by the led product or lighting system.

In order to be able to give the data in **LUMENS** and to be able to reflect this information in the catalogue, we have to go by the data given by the manufacturer (almost all from Asia) and quite often they modified and that is why our metering system is of utmost importance to gain an accurate and reliable reading.



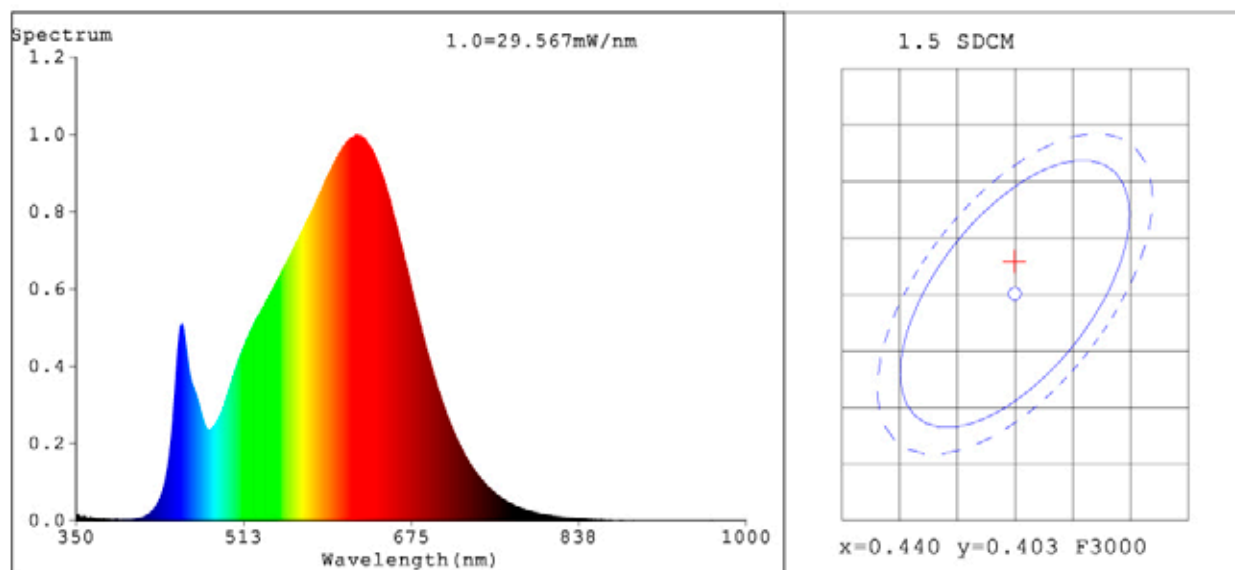
Check with our technical department for prices and discounts.

(For our regular clients and for made-to-measure projects we offer free metering or with considerable discount).



The metering indicated here has been carried out in our laboratory in Barcelona, complying with the metering standards and with duly certified machinery.

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.4399$ $y=0.4059$ $u'=0.2517$ $v'=0.5225$
 CCT=2965K (Duv=0.0003) Dominant WL:Ld =582.9nm Purity=53.9%
 Ratio:R=24.3% G=72.9% B=2.8%; Peak WL:Lp=621.4nm FWHM=164.4nm
 Render Index:Ra=92.1 CRI=89.0
 R1 =92 R2 =96 R3 =98 R4 =91 R5 =91 R6 =94 R7 =92
 R8 =82 R9 =60 R10=89 R11=91 R12=78 R13=93 R14=98 R15=88

Photo Parameters:

Flux = 1486 lm Eff. : 85.70 lm/W Fe = 5.231 W

Electrical parameters:

V = 11.998 V I = 1.445 A P = 17.34 W PF = 1.000

Status: Integral T = 789 ms Ip = 39510 (60%)

Model:Barcelona warm
 Tester:Sergio Carneros
 Temperature:17Deg
 Manufacturer:Luz Negra S.L

Number:1200NB120W
 Date:2017-04-03 12:47:09
 Humidity:70.0%
 Remarks:100cm ledstrip